FREQUENT QUESTIONS

NOAA Coastal Services Center
LINKING PEOPLE, INFORMATION, AND TECHNOLOGY

Ocean and Great Lakes Jobs

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NOAA Coastal
Services Center
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Contents

GENERAL

What is the definition of "Ocean and Great Lakes Jobs"?

"Ocean and Great Lakes Jobs" is defined as employment in six economic sectors that use the oceans and Great Lakes as inputs, either directly (like seafood markets) or indirectly (like hotels serving beachgoers). The data are derived from employment statistics that do not include the number of self-employed workers. A complementary data set is available that shows the number of self-employed workers in the six ocean and Great Lakes sectors. The composition of these six sectors is described in the table below.

Are rivers and bays included in the definition of ocean?

The following major bays and sounds are included:

- Penobscot Bay, excluding Penobscot County (Maine)
- Long Island Sound (Connecticut and New York)
- Delaware Bay (Delaware and New Jersey)
- Albemarle and Pamlico Sounds (North Carolina)
- Stones Bay (North Carolina)
- Tampa Bay (Florida)
- Galveston Bay (Texas)
- San Francisco Bay and Delta (California)
- Puget Sound (Washington)

The following major rivers are included:

- The Hudson River from New York City to Albany County. Does not include Columbia, Greene, or Rensselaer counties.
- The Delaware River to Bucks County, Pennsylvania, and Monmouth County, New Jersey
- The James, Rappahannock, and York Rivers in Virginia and the Potomac River to Alexandria. Does not include any cities that are not on these rivers.
- The Mississippi River to Baton Rouge Parish in Louisiana
- The American River to Contra Costa County in California
- The Columbia River, including Clatsop and Multnomah Counties in Oregon and Wahkiakum County in Washington

What is the difference between employment and jobs and what is reported in this snapshot?

The terms "jobs" and "employment" both refer to labor engaged in the production of goods and services. Most often, "employment" is used in connection with workers who are hired by an employer, while "jobs" may or may not include the self-employed. A further complication is that labor statistics, whether reported as "jobs" or "employment" may or may not be adjusted to account for part-time workers (reported on the basis of full-time equivalency). The Ocean and Great Lakes Jobs Snapshot does not include the self-employed but does include part-time workers without making any adjustments. The disproportionately large number of part-time jobs in some sectors must be considered when comparing wages per worker across the six sectors. The relatively large number of part-time jobs in tourism and recreation, for example, accounts in part for the low wages per worker in that sector. The exclusion of the self-employed excludes a large proportion of the jobs in the fish harvesting industry, as well as self-employed persons in other

sectors. A complementary data set is available that shows the number of self-employed workers in the six ocean and Great Lakes sectors.

What major job categories are not included?

Economics: National Ocean Watch (ENOW) data are derived from a variety of sources. The Ocean and Great Lakes Jobs Snapshot uses the Quarterly Census of Employment and Wages (QCEW), produced by the Bureau of Labor Statistics as described below. The QCEW does not include farm, military, or railroad employment. As noted above, the self-employed are also excluded from these data.

Why doesn't my county have an Ocean and Great Lakes Jobs Snapshot?

ENOW provides data for about 400 counties, 30 coastal states, 8 regions, and the nation. The basic geographic footprint for ENOW's county-level data is a suite of "Coastal Shoreline Counties" determined by using the Federal Emergency Management Agency's definition, which states that a coastal county must

1. have a coastline bordering the open ocean or the Great Lakes or
2. contain coastal high hazard areas (V-zones).

ENOW makes two adjustments to the list of Coastal Shoreline Counties:

1. removal of shore-adjacent counties with no relevant economic activity (11 counties and the District of Columbia) and
2. the addition of counties that are not shore-adjacent but do have significant levels of ocean- and Great Lakes-dependent economic activity (17 counties).

For a full list of counties included in ENOW, see:
http://www.csc.noaa.gov/digitalcoast/_/pdf/enow-counties-list.pdf

What do "NA," and "suppressed" mean?

Some values cannot be published without violating the confidentiality of one or more businesses. By law, these non-zero values must be suppressed in published data, although they are reflected in higher level totals. Suppressed values are represented as "-9999" in ENOW's tabular data and are labeled as "suppressed" in graphic representations.

Why are some of the counties in Alaska reported as "0"?

According to the U.S. Census Bureau, three coastal counties in Alaska (02201, 02232, 02280) were dissolved during the time series of the dataset and were replaced by four newly formed counties (02105, 02195, 02198, 02275). All of these counties are provided in the dataset for historical context, and have data for all sectors reported as 0 for years where the county does not exist.

METHODS

What is the data source and how were the data collected?

Data in this snapshot on ocean-related economic activity are taken from time series data derived from the Bureau of Labor Statistics' Quarterly Census of Employment and Wages (QCEW) database (also known as the ES-202 data). This time series includes the number of establishments, total employment, and total wages based on quarterly tax reports by employers subject to state unemployment insurance (approximately 90% of U.S. businesses). It also includes county-level estimates of gross domestic product (GDP) derived from the Bureau of Economic Analysis' GDP-by-state statistics. Data from these two sources are being integrated under the Economics: National Ocean Watch project, which is led by the National Oceanic and Atmospheric Administration's Coastal Services Center.

What is the North American Industrial Classification System (NAICS)?

NAICS is the standard classification system used by business and government to classify business establishments according to type of economic activity. It is standardized across Canada, Mexico, and the United States. Adopted in 1997, NAICS replaced the Standard Industrial Classification (SIC) and was designed to provide a high degree of comparability with business statistics produced by Canada and Mexico. Information on the current (2012) version of NAICS is available from the Census Bureau at *www.census.gov/eos/www/naics/index.html*.

What industries are included in the sectors and what are their NAICS codes?

Ocean and Great Lakes Economy Sectors and Industries by NAICS Codes			
Sector	Industry	NAICS Code	NAICS Industry (2012 NAICS)
Living Resources	Fish Hatcheries and Aquaculture	112511	Finfish Farming and Fish Hatcheries
		112512	Shellfish Farming
	Fishing	114111	Finfish Fishing
		114112	Shellfish Fishing
		112519	Other Aquaculture
	Seafood Processing	311711	Seafood Canning
		311712	Fresh and Frozen Seafood Processing
		114119	Other Marine Fishing
	Seafood Markets	445220	Fish and Seafood Markets
Marine Construction	Marine Related Construction	237990	Other Heavy and Civil Engineering Construction
Marine Transportation	Deep Sea Freight	483111	Deep Sea Freight Transportation
		483113	Coastal and Great Lakes Freight Transportation
	Marine Passenger Transportation	483112	Deep Sea Passenger Transportation
		483114	Coastal and Great Lakes Passenger Transportation
	Marine Transportation Services	488310	Port and Harbor Operations
		488320	Marine Cargo Handling
		488330	Navigational Services to Shipping
		488390	Other Support Activities for Water Transportation
	Search and Navigation Equipment	334511	Search, Detection, Navigation, Guidance, Aeronautical and Nautical System and Instrument Manufacturing
	Warehousing[1]	493110	General Warehousing and Storage
		493120	Refrigerated Warehousing and Storage
		493130	Farm Product Warehousing and Storage

[1] The 4-digit NAICS codes are supplemented for counties where the 6-digit data are not available.

Ocean and Great Lakes Economy Sectors and Industries by NAICS Codes			
Sector	Industry	NAICS Code	NAICS Industry (2012 NAICS)
Offshore Mineral Resources	Limestone, Sand and Gravel	212321	Construction Sand and Gravel Mining
		212322	Industrial Sand Mining
	Oil and Gas Exploration and Production	211111	Crude Petroleum and Natural Gas Extraction
		211112	Natural Gas Liquid Extraction
		213111	Drilling Oil and Gas Wells
		213112	Support Activities for Oil and Gas Operations
		541360	Geophysical Exploration and Mapping Services
Ship and Boat Building	Boat Building and Repair	336612	Boat Building and Repair
	Ship Building and Repair	336611	Ship Building and Repair
Tourism and Recreation	Boat Dealers	441222	Boat Dealers
	Eating and Drinking Places	722511	Full Service Restaurants
		722513	Limited Service Eating Places
		722514	Cafeterias
		722515	Snack and Nonalcoholic Beverage Bars
	Hotels and Lodging	721110	Hotels (except Casino Hotels) and Motels
		721191	Bed and Breakfast Inns
	Marinas	713930	Marinas
	Recreational Vehicle Parks and Campsites	721211	RV Parks and Recreational Camps
	Scenic Water Tours	487210	Scenic and Sightseeing Transportation, Water (includes charter fishing and head boats)
	Sporting Goods	339920	Sporting and Athletic Goods Manufacturing
	Amusement and Recreation Services	487990	Scenic and Sightseeing Transportation, Other
		611620	Sports and Recreation Instruction
		532292	Recreation Goods Rental
		713990	Amusement and Recreation Services Not Elsewhere Classified
	Zoos, Aquaria	712130	Zoo and Botanical Gardens
		712190	Nature Parks and Other Similar Institutions

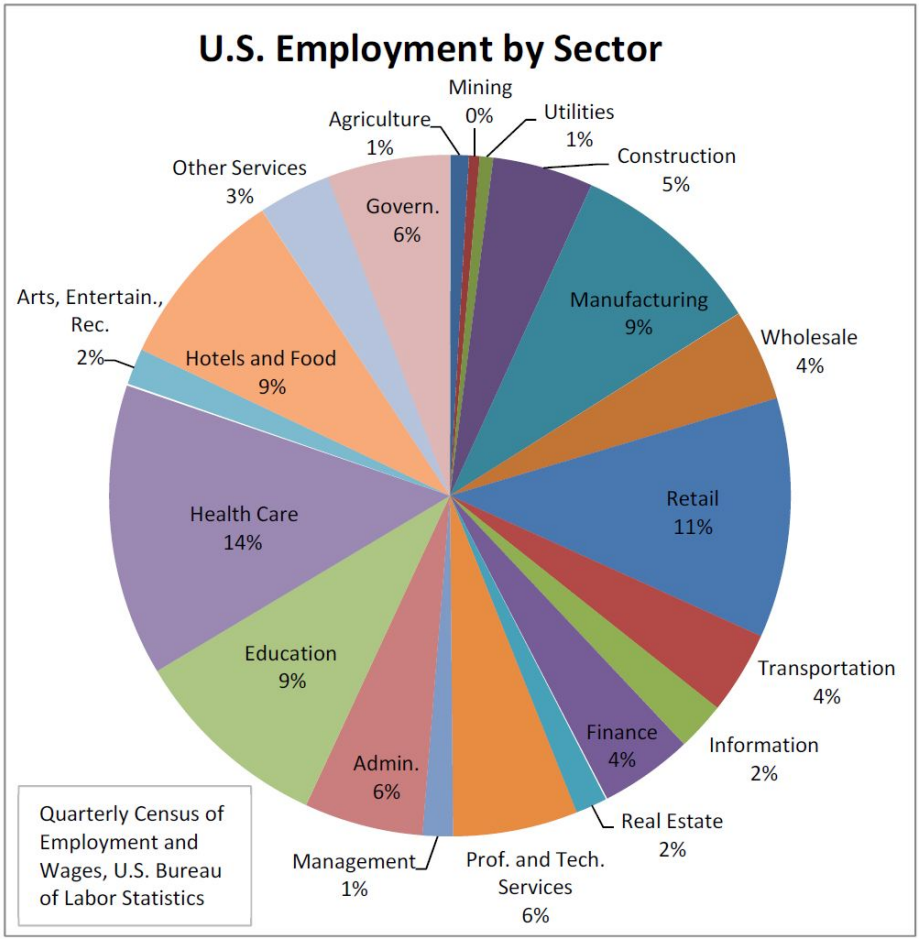
What is the "scope" of ocean and Great Lakes economic sectors?

Most industries included in the six ENOW sectors are defined in terms that make it possible to include all economic activity in the ocean economy. The Tourism and Recreation sector, however, includes businesses like hotels and restaurants that may or may not be dependent on the oceans or Great Lakes. Only those establishments that are very near to the shoreline are likely to be primarily associated with coastal tourism. For this sector, county, state, and national totals include only those establishments located in shore-adjacent zip codes.

Snapshot Box 1: A HEALTHY ECONOMY

Why do ocean and Great Lakes jobs account for only a small percentage of total jobs?

The U.S. economy is enormous and diverse, comprising many relatively small but important parts. The economic sectors that depend on the resources of the oceans and Great Lakes employ nearly 3 million persons who produce about 260 billion in gross domestic product, but this constitutes only about 2 percent of the total U.S. economy. For perspective, this is about twice the size of the agriculture sector. The largest sector in the economy, health care, accounts for only 14 percent of the total.



Why is it important to know the size of the ocean and Great Lakes economy?

A lot of jobs depend directly or indirectly on the resources of the oceans and Great Lakes. Some industries, like shipping or oil and gas production, depend on the resources themselves. Others, like fishing and tourism, depend at least in part on the quality of the ecosystems of the oceans and Great Lakes. Understanding these dependencies can help society make wise decisions about the management of these resources and ecosystems and underscores the importance of doing so.

Snapshot Box 2: OCEAN JOBS BY SECTOR

Why is it important to know the sector distribution of ocean and Great Lakes jobs?

While all sectors depend on the ocean and Great Lakes, they use different resources and benefit from different policies. Tourism depends on the quality of and access to beaches or water, for recreation and enjoyment. On the other hand, the living resources sector depends on the existence of fish, while the minerals sector depends on access to oil, gas, and other natural resources. Understanding which sectors support jobs in a county can more specifically guide planning and policy decisions.

Can I get this information for different years?

Although in a different form, these same data are shown in the trends graph in the next section To create pie charts for a specific year, download the original data from *www.csc.noaa.gov/enow/*.

Why are there missing sectors in the state pie chart?

If a state has only a few establishments in a sector, those data will be suppressed by the Bureau of Labor Statistics and cannot be shown. For details on suppression, see the question, ***"What do "NA," "unknown increase," and "undisclosed" mean?"***

Snapshot Box 3: JOB TRENDS

Why is it important to know the trends of ocean and Great Lakes jobs?

The trend of ocean and Great Lakes jobs provides an indicator to the opportunities or pressures your county is experiencing. An emerging sector may provide a new opportunity for jobs, while a declining sector may have recently let people go. Identifying these opportunities and pressures can assist in changing policies over time to respond to the changing needs of the county.

Snapshot Box 4: NATIONAL AND COUNTY WAGES

Why is it important to know the average annual wage per employee?

While numbers of jobs is an important factor, the annual wage can be insightful. Local wages

that are higher than the national average can be attractive to employees but a deterrent to new or expanding businesses. In addition, at a higher annual wage, employees will have more disposable income to spend in other areas, such as grocery stores or health care facilities. However, all wage levels are important for a healthy economy. Cost of living rates have to be considered when making this comparison.

Another factor to consider is the impact of part-time workers. Average tourism wages, for instance, can be smaller due to the high percentage of part-time workers, but total tourism wages are often among the highest because of the large number of people employed.

Why are there missing sectors for some counties?

Counties will not always have every sector. "N/A" indicates that there are no jobs in that sector for the county. If you believe this is incorrect, it may be because certain types of jobs are not included in the data, see "***What major job categories are not included?***" for more information.

Snapshot Box 5: UNDERSTANDING NEIGHBORS

Why is it important to know the similarities or differences in the region?

The ocean and Great Lakes are shared resources with many potential uses, and often these uses are competing or are in conflict with one another. For this reason, it's not enough to understand your own dependencies upon the ocean and Great Lakes. It is also important to understand the dependencies of neighboring counties in order to carry out effective local and regional planning and decision-making.

Why are the percentage ranges uneven?

The county distribution of ocean and Great Lakes jobs as a percentage of total jobs is not evenly distributed. There are more counties in the lower range (<8%) than in the higher (>8%), so to have a color difference at the local scale, the ranges in the lower percentages needed to be smaller.

DIGGING DEEPER

Where can I access the original data?

The data can be accessed and downloaded through the Economics: National Ocean Watch data page at *www.csc.noaa.gov/enow/*. Base data by traditional economic sectors can be found in the Bureau of Labor Statistics' Quarterly Census of Employment and Wages at *http://www.bls.gov/cew/*.

Where can I find more economic data for my county?

Additional economic data for your county can be accessed through the Economics: National Ocean Watch data page at *www.csc.noaa.gov/enow/*. Additional snapshots on other topics, such as inundation hazards, can be found at *www.csc.noaa.gov/snapshots/*.

What other data are important to consider?

Learning More: Key Economic Sectors

Economic statistics that focus on employment, like those used in this snapshot, miss the contributions of the self-employed. The self-employed are an important part of some sectors, like commercial fishing. NOAA compiles a wide range of data on commercial fishing that more fully illustrate this sector's economic importance (*www.st.nmfs.noaa.gov/st5/*).

Learning More: Values outside the Market

Because many of the natural features that make the coast attractive can be enjoyed at no cost, their value is not evident in the "market" data (jobs, wages, etc.). However, independent studies have estimated these "nonmarket" values (aesthetics, health, safety, etc.).

- State of the Coast: *http://stateofthecoast.noaa.gov/coastal_economy/nonmarket.html*
- National Ocean Economics Program: *www.oceaneconomics.org/nonmarket/*

Using Information: Combining Data to Make Decisions

Combining information on market and nonmarket values to inform coastal management can be complicated. Below are a few resources that will assist in this task.

- General overview in laymen's terms: *www.ecosystemvaluation.org*
- Developing and using information on nonmarket values: *http://nepis.epa.gov/Adobe/PDF/P100ERJY.pdf*
- Assessing trade-offs: *http://csc.noaa.gov/digitalcoast/tools/invest*

Who can I contact for more information?

NOAA's Coastal Services Center maintains the Economics: National Ocean Watch (ENOW) database and produced the snapshot products. For information on the Ocean and Great Lakes Jobs Snapshot please contact the ENOW team: *nos.csc.enow@noaa.gov*.